

Listing of the Claims

The following listing of claims replaces all previous listings or versions thereof:

1. (Canceled) Method for the detection of pathologically-altered prion proteins (PrP^{Sc}) comprising the following steps:
 - a) incubation of a specimen together with a solid carrier, wherein the solid carrier is coupled with a β -pleated-sheet-binding molecule;
 - b) removal of the constituents of the specimen not bound to the β -pleated-sheet-binding molecules; and
 - c) detection of the constituents of the specimen bound to the β -pleated-sheet-binding molecules.
2. (Canceled) Method according to claim 1, wherein the specimen is subjected to a proteinase treatment before step a).
3. (Canceled) Method according to any one of the preceding claims, wherein the solid carrier is a spherical polymer, a plastic surface, silica-gel-coated glass slide, capillary or membrane.
4. (Canceled) Method according to any one of the preceding claims, wherein the β -pleated-sheet-binding molecules are oligopeptides with a length from 3 to 30 amino-acid residues or substituted heterocyclic aromatics.
5. (Canceled) Method according to claim 4, wherein the oligopeptides provide an amino-acid sequence according to SEQ ID NO: 1 to 10.
6. (Canceled) Method according to any one of the preceding claims, wherein the detection is performed by means of an immunological detection method.

7. (Canceled) Kit for the detection of pathologically-altered prion proteins (PrP^{Sc}), comprising at least one solid carrier coupled with β -pleated-sheet-binding molecules, washing solutions, elution solutions and a detection system.
8. (Canceled) Kit according to claim 7, wherein the detection system is an immunological detection system and comprises a second solid carrier, which is coated with an anti- PrP -antibody, an enzyme-marked second antibody, substrate solutions and stop solutions.
9. (Canceled) Kit according to claim 7 or 8, wherein one solid carrier is packed in a disposable column and the second solid carrier is a microtitre plate.
10. (New) A method for the detection of pathologically-altered prion proteins (PrP^{Sc}), comprising the following steps:
 - a) incubating a specimen together with a solid carrier, wherein the solid carrier is coupled with a β -pleated-sheet-binding molecule, wherein the β -pleated-sheet-binding molecule is an oligopeptide, selected from the group consisting of oligopeptides of the amino-acid sequences according to SEQ ID NO: 1 to 10, or a substituted heterocyclic aromatic, selected from the group consisting of thioflavin T, baicalin and quercitrin;
 - b) removing the constituents of the specimen not bound to the β -pleated-sheet-binding molecules; and
 - c) detecting the pathologically-altered prion proteins (PrP^{Sc}) of the constituents of the specimen bound to the β -pleated-sheet-binding molecules.
11. (New) A method according to claim 10, wherein the specimen is subjected to a proteinase treatment before step a).
12. (New) A method according to claim 10, wherein the solid carrier is a spherical polymer, a plastic surface, silica-gel-coated glass slide, capillary or membrane.

13. (New) A method according to claim 10, wherein the detection is performed by means of an immunological detection method.
14. (New) A method according to claim 11, wherein the specimen is subjected to a proteinase treatment before step a).
15. (New) A method according to claim 11, wherein the solid carrier is a spherical polymer, a plastic surface, silica-gel-coated glass slide, capillary or membrane.
16. (New) A method according to claim 11, wherein the detection is performed by means of an immunological detection method.
17. (New) A kit for the detection of pathologically-altered prion proteins (PrP^{Sc}), comprising at least one solid carrier coupled with β -pleated-sheet-binding molecules, washing solutions, elution solutions and a detection system.
18. (New) A kit according to claim 17, wherein the detection system is an immunological detection system and comprises a second solid carrier, which is coated with an anti-PrP-antibody, an enzyme-marked second antibody, substrate solutions and stop solutions.
19. (New) A kit according to claim 17, wherein one solid carrier is packed in a disposable column, and the second solid carrier is a microtitre plate.
20. (New) A kit according to claim 18, wherein one solid carrier is packed in a disposable column, and the second solid carrier is a microtitre plate.